Chapter 11: Chemical Reactions

**Section 11.1 Describing Chemical Reactions (pg. 321-329)**

1. Write word equations from chemical equations
2. Write chemical equations from word equations
3. Identify reactants, products, and physical states in a chemical equation
4. Know symbols that could be used in chemical equations (Table 11.1, pg. 323)
5. Interpret coefficients and subscripts in a chemical equation
6. Balance chemical equations to demonstrate the law of conservation of mass

**Section 11.2 Types of Chemical Reactions (pg. 330-339)**

1. Classify reaction types as combustion, synthesis, decomposition, single replacement or double replacement
2. Know the physical states of substances based on general solubility rules
3. Predict the products of chemical reactions based on the nature of the reactants

**Section 11.3 Reactions in Aqueous Solution (pg. 342-344)**

1. Write net ionic equations and identify spectator ions
2. Predict the formation of a precipitate

Chapter 11 Written Work

Pg 348-350 #56, 57b, 58b, 59b, 60c, 61, 62a, 63a, 65, 66, 67a,c,e, 69, 70a,c,e, 71, 74, 75, 76, 80, 81a,c,d, 82

Pg. 351 2, 4, 8-10, 12

Supplemental Questions

1. Watch the following “you tube” videos <http://www.youtube.com/watch?v=BhO8kGrc4dg> and write the balanced chemical equation, complete with physical states as seen in the video.
2. What is the evidence that a chemical change has occurred?
3. Create and balance any chemical equation in which one of the products is a precipitate. Use two reactants that are both in aqueous form.
4. What are the three potentially hazards chemical that can be created when mixing bleach and ammonia? Use the following link to find out:

<http://wiki.answers.com/Q/What_happens_when_you_combine_bleach_and_ammonia>.

1. In the lab, you attempt to isolate pure copper using the following reaction

CuCl2 + 2 Na 2NaCl + Cu

You only have 15g of Sodium to use for this reaction. How much copper(II) must you combine with the sodium to isolate the maximum amount of copper possible.